

## **Report Card Brief**

### ***Score Fluctuations in Accountability Report Cards***

#### **Many school and district report card scores have fluctuated since last year.**

While conducting internal reviews and quality assurance checks prior to the secure release of the preliminary Accountability Report Cards, staff from the Office of Educational Accountability (OEA) noticed large score changes for many – but not all – schools and districts. Compared to last year’s report card scores, these fluctuations appear in both Overall Scores and particularly in the Growth priority area scores. Across the board, the Growth priority area had the largest average score change of the four priority areas on the report card, and is the largest driver of the average change in Overall Score between years. Some schools and districts will see significant value-added score fluctuations between the 2015-16 and 2016-17 report card years, resulting in large Growth score and Overall Score changes across the two years.<sup>1</sup>

#### **Use caution.**

Because score fluctuations are larger this year, and more widespread than would be expected, a cautious approach to report card interpretation is needed. Larger than expected year-to-year score fluctuations are considered outliers and noted by ^ when a school or district has a 10-point or greater change (up or down) in both their Overall Score and Growth Score. As such, please use caution when reviewing report cards that have ^ symbol next to their rating as it is unclear whether the change in scores is due to an actual change in school/district performance, or a symptom of statistical volatility.

#### **Look deeper.**

DPI encourages exploration of priority area scores and data for all schools, and particularly for schools that fall within the parameters for the ^ symbol. An examination of the student achievement priority area will uncover performance trends, and the closing gaps priority area shows how a school or district is contributing to closing statewide achievement gaps.

#### **Value-Added calculations are driving the bulk of the score fluctuations.**

2015 Wisconsin Act 55 (Act 55) required the use of a value-added growth calculation in the Growth priority area on the Accountability Report Cards, replacing student growth percentiles as of 2015-16 report cards. Value-added growth models utilize statistical controls and processes that can result in considerable fluctuation in year-to-year growth scores. These fluctuations are not necessarily reflective of actual amount of change at the school or district level. These fluctuations became apparent upon review of the value-added data produced by the University of Wisconsin for use in the accountability index. It is important to note that while variation is inherent to value-added methodologies, a change in statewide assessment, from Badger to Forward, is likely to have contributed to some of the volatility in the value-added scores. Additional years of Forward test data should partially mitigate this issue.

#### **Variable weighting exacerbates the score fluctuations.**

Intensifying these score fluctuations is variable weighting, which was also legislated under Act 55. Variable weighting places more weight on school and district Growth scores as rates of economically disadvantaged students (ECD) increase. This added weight on the Growth score amplifies the impact of

---

<sup>1</sup> For detailed analysis of the score fluctuations, see OEA’s Technical Memo.

score volatility on school and district scores, causing large fluctuations in the number of stars some schools or districts received on their 2015-16 and their 2016-17 Report Cards.

**Score fluctuations have more impact on small subgroups/schools/districts as well as schools with high ECD rates.**

Schools of different sizes are affected differently by this volatility in scoring. Statistically, more data points lead to more stability and reliability. We see that scores are more stable for Wisconsin's large schools and less stable for Wisconsin's small schools, and in schools that have small student subgroups. Since variable weighting is based on ECD rates, the higher the ECD rate for a school, the more impact the value-added calculation bears on overall scores.

**Score fluctuations fall outside of the expected and typical year-to-year fluctuations.**

Accountability scores fluctuate to some extent each year due to randomness and standard measurement error, but the average size of fluctuations should be similar year-to-year. However, the trend in score fluctuations in report cards since Act 55 are outside of the expected range of variability.

- Prior to the 2015 introduction of value-added Growth scoring and variable weighting that changed the weight of Growth, report card scores were relatively stable on a year-to-year basis. For example, about one-third of schools changed by at least one rating category on the 2012-13 and 2013-14 report cards. Between 2015-16 and the current 2016-17 report cards, nearly 42% of schools changed at least one rating category.
- There are also larger score differences. Prior to Act 55 less than 1% of schools changed two or more categories over the course of a report card year. This year, with the 2016-17 report cards, 3.7% of schools moved two or more categories.
- The 2016-17 report cards use the same measures and weighting formula as the 2015-16 report cards, yet there is still more volatility between the 2015-16 and 2016-17 Report Card score distributions and the comparable score distributions prior to the legislative changes. The average overall score annual change prior to Act 55 was about 3.3 points. Since Act 55, the average score change is 5.8 points.

**Score fluctuations are expected to continue.**

Although volatility in value-added scores may decrease with another year of Forward testing, score fluctuations are likely to continue, especially for smaller schools and districts. The Department strives for a valid, reliable, and fair accountability system and has been working to produce the most accurate report cards possible. Stabilizing accountability scoring and investing in the integrity of the accountability system is a top priority, but any modifications to these metrics require legislative action. To that end, the Department is engaging state policymakers, technical experts and stakeholders about how best to address these issues.

We also strive for transparency and stakeholder engagement to increase understanding of the state accountability system. To that end, working with schools and districts to understand their report card scores remains our first priority.

**Further Information**

For further information on report card score changes, please see the [score flux](#) page. For explanatory information on the Accountability Report Cards, the priority areas included, and the calculations within, please see the [resources](#) page.